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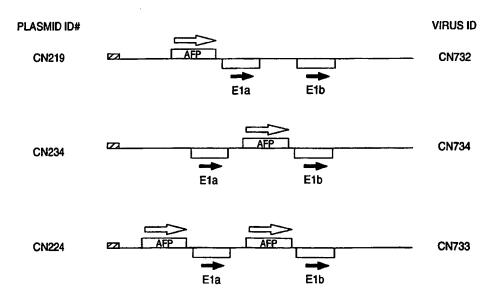
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(54) Title: ADENOVIRUS VECTORS SPECIFIC FOR CELLS EXPRESSING ALPHA-FETOPROTEIN AND METHODS OF USE THEREOF



#### (57) Abstract

Adenovirus vectors replication specific for cells expressing  $\alpha$ -fetoprotein (AFP) and their methods of use are provided. By providing for a transcriptional initiating regulation dependent upon AFP expression, virus replication is restricted to target cells expressing AFP, particularly hepatocellular carcinoma cells. The adenovirus vectors can be used to detect and monitor samples for the presence of AFP-producing cells as well as to kill selectively malignant cells producing AFP.